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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/650,073	08/29/2000	Edward A. Jakush	97-676.5	9189

7590

05/03/2006

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EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/650,073

Applicant(s)

JAKUSH ET AL.

Examiner

Cephia D. Toomer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 09 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-15, 17, 18, 20-34, 36, 37 and 39-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15, 17, 18, 20-34, 36, 37 and 39-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the amendment filed February 9, 2006 in which claims 12, 16, 19, 35 and 38 were canceled.

The rejections of the claims under 35 USC 112, first and second paragraphs are withdrawn in view of Applicant canceling the claims.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-11, 13-15, 17-34 and 36-38 are rejected under 35 USC 103(a) as being unpatentable over Dubin (US 5,284,492) for the reasons of record.

Applicant argues that Dubin does not teach a coupling agent for maintaining phase stability at high temperatures and shear pressures in an internal combustion engine.

Dubin teaches at col. 4, lines 50-52 that emulsion stability can be enhanced by use of surfactants and the like which act as emulsifiers or emulsion stabilizers. Furthermore, Dubin teaches the addition of dimer and/or trimer acids, sulfurized castor oil and phosphate esters (see col. 7, lines 15-23). The preferred agents are dimer acids that are generally made by Diels Alder reaction (see col. 7, lines 24-51). These are the same compounds that are disclosed in the specification as coupling agents. Given these teachings, the surfactants and dimer/trimer acids of Dubin have dual functions and may function as set forth in Dubin, or as coupling agents, as desired by Applicant.

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From the standpoint of patent law, a compound and all its properties are inseparable. In *re Papesch*, 137 USPQ 43 (CCPA 1963).

Applicant's argues that Dubin fails to teach a fuel emulsion for an internal combustion engine (IC) and that it is clear that IC and turbines are not the same and that they require fuels with different stabilities.

If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed inventions limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowers, Inc. v. Hewlett-Packard Co.*, 51 USPQ2d 1161 (Fed. Cir. 1999). Dubin clearly renders obvious the claimed composition.

Applicant argues that Dubin does not teach an emulsion having an average droplet size ranging from about 0.1 microns to about 1 micron.

Dubin teaches at least 90% of the droplets are below about 5 microns. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the particle size of the droplets through routine experimentation for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Bosch*, 205 USPQ 215 (CCPA 1980); *In re Woodruff*, 16 USPQ2d 1934 (Fed. Cir. 1990); *In re Aller*, 105 USPQ 233 (CCPA 1955). Furthermore, Dubin teaches the same surfactant package as set forth in the

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present invention and it would be reasonable to expect that the surfactant package of Dubin would produce such small droplets, absent evidence to the contrary.

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cephia D. Toomer
Primary Examiner
Art Unit 1714

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